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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,862

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Koji Tsuchida

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EXAMINER

DICUS, TAMRA

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

11/27/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/553,862	Applicant(s) TSUCHIDA ET AL.	
	Examiner TAMRA L. DICUS	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,7-13 and 16-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,7-13 and 16-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

All prior rejections are withdrawn. The declaration is convincing. A new ground of rejection is presented below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 4, 8 and 21 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 7,303,812 to Hashimoto et al.

Hashimoto teaches a heat shrinkable multilayer label having a core (B) surrounded by skin layers (A), where the when an opaque film layer is required, calcium carbonate, titanium dioxide, carbon black and blends are used in the core and skin layers (3:15-68, 4:1-20, 5:20-30) in 0.1 to 20 wt% (equivalent to meeting Applicant's 1-20% by volume, while Hashimoto uses wt%, volume is a function of weight and thus would be expected to be equivalent-see Examples 4-6) along with resins such as polyethylene or polystyrene (5:45-68) and are adhered to plastic bottles or other flexible articles (1:5-15, embraces container, 11:35-45) and done so without adhesive (e.g. "shrink-wrapped" to PET bottle-claim 21). See Tables 1-3. Heat shrinkage is measured and equated and thus is an optimizable feature. See 2:40-68. While Hashimoto quantifies the transmittance measurement in percentage and not factor value (see 2:40-68), Hashimoto does not expressly state the recited properties of transparency, transmission or W-value, however, because the same colors and materials are employed, the resultant properties are presumed inherently present.

Alternatively, if not inherent, then it would have been obvious to one having ordinary skill in the art to have modified the amount of colors to produce the desired properties because the colors produce opaque films, and

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thus effects the opacity of the label as cited above. Additionally, what happens when something else happens, e.g. when the film is immersed in hot water, is not a positive recitation.

Moreover, the recitation what happens when something else happens (e.g. heat-shrinkage percentage of the film is about 20% to about 90% when the film is immersed in hot water at 90 degrees for ten seconds) is not given weight as it is not a positive recitation and may or may not occur.

Hashimoto does not teach the volume percentage as claimed, however, volume relates to the size and is obvious to adjust and modify especially in view of the thickness variations (9:10-35, as thickness is a function of volume). It has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284. Size of an article ordinarily is not a matter of invention. The size relating to volume recitations of each layer are all deemed matters of choice involving differences in degree and/or size and are not patentable distinctions. *In re Rose*, 105 USPQ 237.

Further to claim 1, how the film is prepared is represents process limitations in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited

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process steps which must be established. *In re Brown*, 459 F. 2d 531. Both Applicant's and prior art reference's product appear to be chemically and structurally the same.

Claims 1, 4, 7-8 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,303,812 to Hashimoto et al. in view of US 6,749,936 to Argoitia et al.

Hashimoto teaches a heat shrinkable multilayer label having a core (B) surrounded by skin layers (A), where the when an opaque film layer is required, calcium carbonate, titanium dioxide, carbon black and blends are used in the core and skin layers (3:15-68, 4:1-20, 5:20-30) in 0.1 to 20 wt% (equivalent to meeting Applicant's 1-20% by volume, while Hashimoto uses wt%, volume is a function of weight and thus would be expected to be equivalent-see Examples 4-6) along with resins such as polyethylene or polystyrene (5:45-68) and are adhered to plastic bottles or other flexible articles (1:5-15, embraces container, 11:35-45) and done so without adhesive (e.g. "shrink-wrapped" to PET bottle-claim 21). See Tables 1-3. Heat shrinkage is measured and equated and thus is an optimizable feature. See 2:40-68. While Hashimoto quantifies the transmittance measurement in percentage (see 2:40-68), and so Hashimoto does not expressly state the recited properties of transparency, transmission or W-value, however, because the same colors and

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materials are employed in combination, the resultant properties are presumed inherently present.

Alternatively, if not inherent, then it would have been obvious to one having ordinary skill in the art to have modified the amount of colors to produce the desired properties because the combination teaches the colors produce opaque films, and thus effects the opacity of the label as cited above. Additionally, what happens when something else happens, e.g. when the film is immersed in hot water, is not a positive recitation.

Moreover, the recitation what happens when something else happens (e.g. heat-shrinkage percentage of the film is about 20% to about 90% when the film is immersed in hot water at 90 degrees for ten seconds) is not given weight as it is not a positive recitation and may or may not occur.

Hashimoto does not teach the volume percentage and recited properties (transparency, W-Value) as claimed, however, volume relates to the size and is obvious to adjust and modify especially in view of the thickness variations (9:10-35, as thickness is a function of volume) and said properties are optimizable features. It has been held that the provision of adjustability, where needed, involves only routine skill in the art. *In re Stevens*, 101 USPQ 284. Size of an article ordinarily is not a matter of invention. The size relating to volume recitations of each layer are all deemed matters of choice involving differences in degree and/or size and are not patentable distinctions. *In re Rose*, 105 USPQ 237. It is submitted the optimal and/or claimed values of the

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respective material would have been obvious to the skilled artisan at the time the invention is made since it has long being held that such discovery, such as an optimum value of the respective result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272,205 USPQ 215(CCPA 1980). See also MPEP § 2144.05 II (B).

Further to claim 1, how the film is prepared is represents process limitations in a product claim. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Patentability of an article depends on the article itself and not the method used to produce it (see MPEP 2113). Furthermore, the invention defined by a product-by-process invention is a product NOT a process. *In re Bridgeford*, 357 F. 2d 679. It is the patentability of the product claimed and NOT of the recited process steps which must be established. *In re Brown*, 459 F. 29 531. Both Applicant's and prior art reference's product appear to be chemically and structurally the same.

Hashimoto does not teach using optional achromatic colors or the transparency, transmission or W-value properties per instant claims 1 and 4 while teaching applications to bottle containers (claim 8). Hashimoto does not teach using an ink layer (per claim 7).

Argoitia teaches achromatic multilayer pigments used in ink, paint, or moldable plastic material with resins such as styrenes (21:1-30) and combined with pigments (chromatic) TiO₂ to produce unique color effects and with

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carbon black, blue or aluminum to control lightness and other color properties used as inks for printing on packaging, containers, or used to form colored plastic materials, extruded parts and laminating films (21:50-68, 22:1-36).

It would have been obvious to one having ordinary skill in the art to have modified the article of Hashimoto to include achromatic or chromatic color in any layer and printed with ink because Argoitia teaches advantages such as unique color effects lightness control, and making an article decorative used in packaging or containers as cited above.

Claims 9-13, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,303,812 to Hashimoto, solely or alternatively, in view of US 6,749,936 to Argoitia et al. as applied to claim 1, and further in view of WO 99/61245 (Bergholts et al.).

It is noted that when utilizing WO 99/61245 in the above paragraph, the disclosures of the reference are based on US 6,866,907 which is an English language equivalent of the reference. Therefore, the column and line numbers cited with respect to WO 99/61245 are found in US 6,866,907.

The combination does not teach the percentages of white and black colorants as claimed (claims 9-13 and 16-20).

Bergholts teaches a packaging material of similar shrinkable polyethylene coextruded material and structure wherein the core and outer skin layers may comprise 3-80% white particles, TiO₂ in 5% or less, and black

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colorant carbon black from 0.04-1%, which all fall in Applicant's recited ranges. See 3:1-60, 4:20-55, 5:1-45. Such additions make the overall film for bottles have a consumer-attractive white appearance despite the presence of carbon black in the packaging material. See also patented claims 1-9.

It would have been obvious to one having ordinary skill in the art to have modified the combination in view of the colorant percentages as claimed because Bergholts teaches such ranges have a consumer-attractive white appearance despite the presence of carbon black in the packaging material as cited above. Further it would have been obvious to one having ordinary skill in the art to have modified the colors to include any color, including yellow or brown, due to aesthetics. Motivation need not be found in the references sought to be combined, but may be found in any number of sources, including common knowledge, the prior art as a whole, or the nature of the problem itself. *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969). Having established that this knowledge was in the art, the examiner could then properly rely, as put forth by the solicitor, on a conclusion of obviousness “from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference.” *In re Hoeschele*, 406 F.2d 1403, 1406-407, 160 USPQ 809, 811-12 (CCPA 1969).

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMRA L. DICUS whose telephone number is (571)272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Ruthkosky can be reached on 571-272-1291. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Ruthkosky/
Supervisory Patent Examiner, Art Unit 1794

Tamra L. Dicus /TLD/
Examiner
Art Unit 1794

November 9, 2009